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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

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032904

INVENTOR(S)					
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<input type="checkbox"/> Additional inventors are being named on the ____ separately numbered sheets attached hereto					
TITLE OF THE INVENTION (280 characters max)					
RE-SEALING MECHANISM FOR A SOLID DOSAGE DISPENSER					
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Respectfully submitted

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32,938

62357.TBA

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Jean-Pierre Giraud
APPLICATION No.: To Be Assigned
FILING DATE: March 29, 2004
ATTORNEY DOCKET: 62357.TBA
TITLE: RE-SEALING MECHANISM FOR A SOLID DOSAGE DISPENSER

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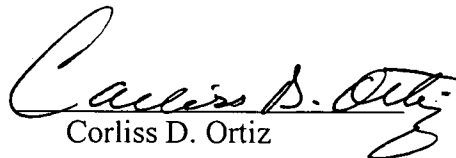
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RE-SEALING MECHANISM FOR A SOLID DOSAGE DISPENSER

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Docket: 62357.TBA

PROVISIONAL

PRESENT INVENTION

The present invention relates to a mechanism that, in one embodiment, is used in a solid dosage dispenser that presents a single dosage form during shelf life and after each index cycle. The invention provides a moisture tight environment during shelf life and use life.

Solid dosage forms are typically used to deliver pharmaceutical, medicated confectionary, and confectionary products. These dosage forms include but are not limited to: compressed tablets, coated tablets, capsules, caplets, liquid gels, liquid encapsulated beads, et al. One example of a solid dosage dispenser is an active dispenser where a user pushes a button or lever and one dosage form exits the container at a time.

In one embodiment, the dispenser consists of multiple pieces. One piece of the dispenser is an element that creates a moisture tight seal at the place where the dosage form exits the dispenser. Another aspect is to protect the seal area from being damaged due to accidental contact with foreign matter.

The present invention comprises a sealing “door” or “plug” to seal and protect the dispensing opening/hole. In one embodiment, the dispensing hole may be an actual hole or a slit within an elastomeric material. For example, the plug can be any shape (e.g. circular, oval, rectangular, square,...). In another example, the “door” or “plug” can include a plugging principle (a “male” to plug the “female”) whereby through interference, the opening is sealed and resealed upon opening and closing. In yet another example, the hole can be plugged through interference with the plug by using the same material or can rely upon the use of dissimilar materials (e.g. PP and HDPE, PP and TPE, or others).

In yet another embodiment, the “door” or “plug” applies pressure to an elastomeric gasket on the container that forms and protects the dispensing hole.

In a further embodiment, the present invention uses a foil seal over the top of the “hole”. The foil material can be affixed to the material (e.g. PP or PE) that surrounds the gasket material and not onto the gasket material itself.

In another embodiment, the door can be created through a living hinge with the container or can be attached afterwards by using common locking mechanisms. In another example, the door can be engineered to require at least two movements to release it and could provide a mechanism for providing a Child Resistant package. In yet another example, the door can be designed to catch and/or retain the dosage form once it has been dispenser from the container.

In another embodiment, the present invention relates to moisture-tight and resealable mechanism. The term “resealable” means that the container can be opened/reopened and closed/reclosed a numerous amount of times (e.g. more than 5 times) and still retain its moisture-tight properties. The term “moisture tight” means the moisture ingress of the container (after three days) was less than about 1000 micrograms of water, in another embodiment, about 750 micrograms of water, in a further embodiment, about 250 micrograms of water determined by the following test method: (a) place one gram plus or minus 0.25 grams of molecular sieve in the container and record the weight; (b) the container is closed by applying, in a singular motion, a frontal downward pressure upon the thumb tab until the rim portion, adjacent to the thumb tab, contacts the inside flat part of the cap also adjacent to the thumb tab; (c) place the closed container in an environmental chamber at conditions of 80% relative humidity and 72F; (c) after one day, weigh the container containing the molecular sieve; (d) after four days, weigh the container containing the molecular sieve; and (e) subtract the first day sample from the fourth day sample to calculate the moisture ingress of the container in units of micrograms of water.

Figures 1 through 4 illustrates embodiments of the present invention. Figure 1 shows a dispenser with an enlarged view one embodiment of the sealing mechanism. In the enlarged view, the foil seal is also shown. The door applies pressure to the elastomeric seal of the container when closed to form a moisture-tight seal. Figure 2 shows another embodiment of the sealing mechanism in both the open and closed positions. In the open position, the “door” (e.g. “plug”) on the lid allows the seal to be opened. In the closed position, the plug contacts the elastomer on the container and thus, seals the container. In one example, the container comprises a portion, which contacts the plug, composed of an elastomer or like materials. Figure 3 shows yet another embodiment of the sealing mechanism in both the open and closed positions. In the open position, the foil seal is applied to the container (e.g. welded) and the lid does not contact the container. In the closed position, the plug of the lid is applied over the foil seal and the plug creates an interference fit with the container. In one example, the plug and the container are composed of the same material (e.g. PP or PE (Hd/Ld)). Figure 4 shows a further embodiment of the sealing mechanism in both the open and closed positions whereby the plug again creates an interference fit with the container. In one example, the plug and the container are composed of the same material (e.g. PP or PE (Hd/Ld)).

In another embodiment, the sealing mechanism of the present invention is used in a single dispense solid dosage dispenser. In a further embodiment, the sealing mechanism of the present

invention creates a moisture tight seal that protects the product in the dispenser during its shelf life and use life. In yet another embodiment, the sealing mechanism of the present invention creates a moisture tight seal by the interference of a plug in an opening with the same materials used in the container and lid. In another embodiment, the sealing mechanism of the present invention creates a moisture tight seal by the interference of a plug in an opening with the plug being composed of a different materials than that used in the container and lid. In another embodiment, the sealing mechanism of the present invention uses, in addition to the plug, a foil seal over the opening. In another embodiment, the sealing mechanism of the present invention creates a moisture tight seal by compressing an elastomer in conjunction with the plug. In another embodiment, the sealing mechanism of the present invention comprises a “door” or “plug” created as one piece so as to be a living hinge or assembled to a dispenser. In another embodiment, the sealing mechanism of the present invention comprises a plug having two distinct movements to release in order to create a Child Resistant package. In another embodiment, the sealing mechanism of the present invention comprises a door or plug that catches the dosage so that it does not need to be touched by the user.

Whereas particular embodiments of the present invention have been described above as examples, it will be appreciated that variations of the details may be made without departing from the scope of the invention. One skilled in the art will appreciate that the present invention can be practiced by other than the disclosed embodiments, all of which are presented in this description for purposes of illustration and not of limitation. It is noted that equivalents of the particular embodiments discussed in this description may practice the invention as well. Therefore, reference should be made to the appended claims rather than the foregoing discussion of examples when assessing the scope of the invention in which exclusive rights are claimed.

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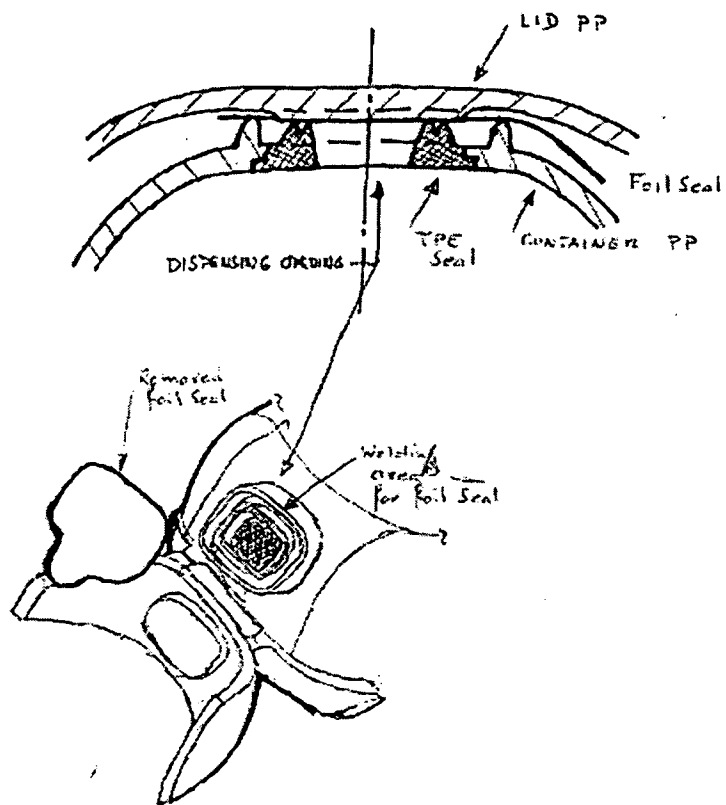
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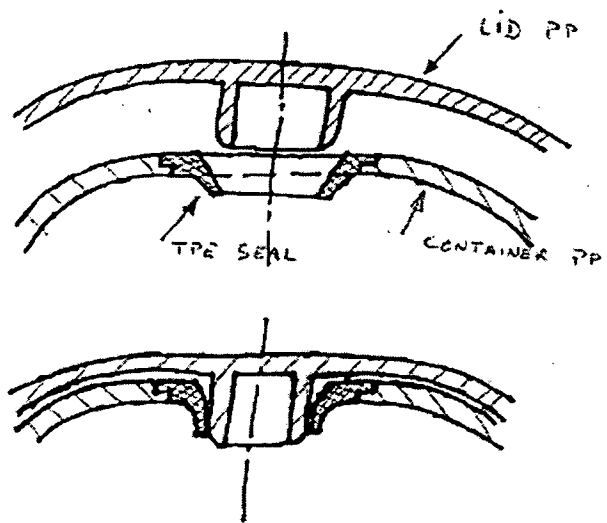
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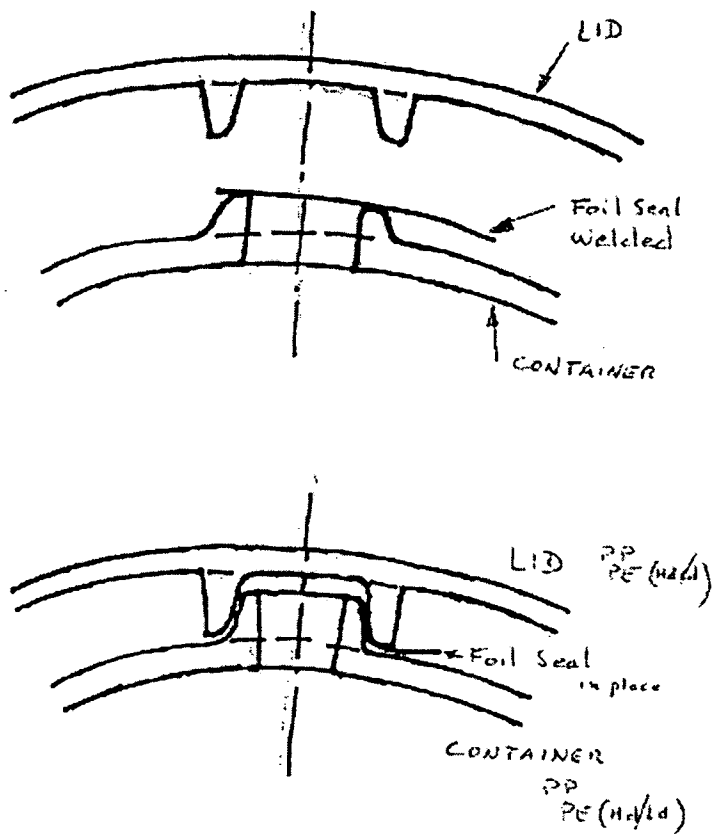
- FOIL SEAL COVERING OPENING
- DOOR APPLIES PRESSURE TO ELASTOMERIC GASKET WHEN CLOSED

FIG. 1



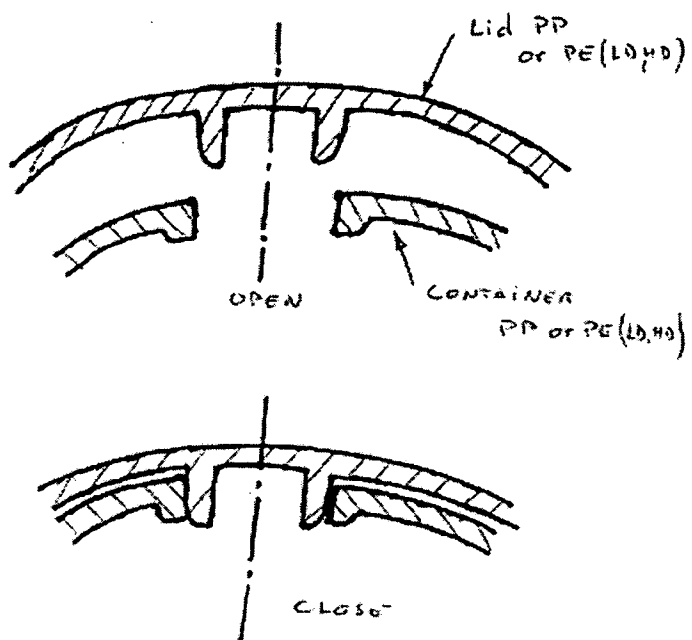
PLUG ON LID SEALING ^{INTO} ELASTOMER AT
DISPENSING OPENING

FIG. 2



FOIL SEAL OVER DISPENSING OPENING
 PLUG CREATES INTERFERENCE WITH SIMILAR
 MATERIALS

FIG. 3



PLUG CREATES INTERFERENCE WITH SIMILAR MATERIALS

FIG. 4